

# The Cherokee Electronic Dictionary: Balancing the needs of learners, speakers, and linguists

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# Cherokee language in Oklahoma

- Only 11% of CN speaks Cherokee
- Most tribal members who speak it are over 40
- No longer being learned as a home language
- Will become moribund in 3 decades if present trends continue
- Around 9,000 speakers
- CN spends 4.9 million on language programs annually
- Immersion school: preschool to 3<sup>rd</sup> grade
- Bachelor of Arts in Cherokee language education at Northeastern State University

# Project Goals

- To create an exhaustive multimedia database of all Cherokee stems, affixes, and words
- To help train new Cherokee language specialists

## Project sponsors

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- Cherokee Nation Education Corporation
- Supporting role: Cherokee Education Degree Program at NSU

# Who will benefit?

- Cherokee language learners
- Fluent Cherokee speakers
- CN employees, particularly CRC and Curriculum development
- Language advisory council
- Linguists
- Anyone interested in learning about Cherokee language and culture

## General Work Goals :Year one

- Create a useable database of approximately 8,000 entries from existing sources such as dictionaries, dissertations, and word lists
- Train five Cherokee language specialists

## General Work Goals : Years two and three

- Expand database using primary documents (letters, newspaper articles, diaries, etc. )
- Expand database through interviews and formal elicitation
- Begin training sessions on database usage
- Obtain user feedback on format

## Special features of Database: Learners

- Syllabary used throughout
- Examples for every entry, including 5 entries for all verbs
- All example sentences accompanied by audio file
- Links to grammar explanations
- Stem form as main form



## **Stem forms as main citation form allow users to**

- correctly produce all the forms of the word
- understand otherwise opaque derivational relationships
- receive passive exposure to grammatical rules

(Montgomery-Anderson 2008)

# Stem forms as main citation form

- Prepronominal prefixes and pronominal prefix removed
- Removal of postpronominal
- Removed prefixes indicated by one or more hyphens

# Stems are productive bases

‘A very important principle in the choice of a citation form is relative productivity. The form chosen must be as good a starting point as possible for the construction of other forms in the paradigm.’

(Bartholomew and Schoenhals 1983:37)

## Electronic format especially appropriate for

- Over 3,000 students who enroll in online classes every year (PC Gloria Sly)
- Northeastern State University CEDP students

# Learners:

## Students at Northeastern State University



Tahlequah, Oklahoma

- 29% of student body is American Indian
- More American Indian students graduate from NSU than any other university
- Only BA in continental US in an American Indian Language

## Special features of Database: Teachers

- Are easily searchable for creating lesson plans
- Grammar embedded throughout to encourage teachers to avoid the CAN trap
- CAN: colors, animals, numbers
- Can be used for homework assignments  
example: **Cherokee Phoenix articles**

## Special features of Database: Speakers

- Repository for archaic terms
- Syllabary used throughout and searchable with syllabary
- Different spellings and pronunciations
- Repository for recently coined terms

# Electronic databases

- ‘... can cater for various levels of IL [Indigenous Language] knowledge and literacy skills’ (Corris et al. 2004:57)
- ‘...allow different ways of looking up words’ (Corris et al. 2004:58)



## Special features of Database: Linguists

- Linguistically accurate forms (length and tone)
- Stem forms
- Displays of information that still needs to be collected
- Displays of items that have a common property
- Removal of frozen postpronominal for secondary root entries

# Process as important as product

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- Create language professionals
- Encourage interactions between fluent speakers and second language learners

## Process:

**Indigenous language professionals are needed to develop indigenous views of the language**

‘Through illustrations of octopuses bearing varying numbers and shapes of tentacles, language teachers in the finer nuances of Hawaiian language learners are taught the Cherokee morphology may hold promise for basic forms that constitute up to 80% of developing language teachers’ understanding of their native language’s linguistic structures (Peter et al. 2008:182) while validating the rich linguistic abilities they possess.’ (Peter et al. 2008:182)

## Process:

**Indigenous language professionals are needed to develop indigenous views of the language**

- 'We need to develop original materials in Hawaiian that can reflect our own culture, perspective, and reality.' Laiana Wong, Hawaiian language instructor and translator. (cited in Warschauer 1998)

## Indigenizing the database

‘...the task of compiling a language documentation is not an easy one. Ideally, the person in charge of the compilation speaks the language fluently and knows the cultural and linguistic practices in the speech community very well.’  
(Himmelman 2002:15)

## Halfway through Year One we have:



- A database of approximately 5,000 entries
- 4 motivated Cherokee students who are busy entering data
- Work underway on new database
- Some audio file recordings

# Current database

- All of *A Reference Grammar of Oklahoma Cherokee*
- All of *Cherokee Folk Zoology*
- All of *Cherokee-English Language Resource Book*
- Many sentences from *Cherokee Phoenix*
- Many sentences from *Cherokee-English Dictionary*
- Many sentences from *Cherokee Literacy Handbook*

# Issues

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- Standard non-syllabary orthography
- Best way to present different dialects
- New database layout
- Linguistic training for student workers



## Balancing the needs of different users...

- Speakers: unnatural stem form as main form
- Linguists: practical orthography/  
orthographies, not a root dictionary

# Future directions

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- Monolingual dictionary
- Inclusion of texts
- Community-led

**\4! mahalo!**

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**Thank you!**

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